

16 funneling said cut pieces off said sheet in said arcuate trough shape.

17. A method for using a flexible cutting sheet for food preparation,
2 comprising:

3 providing a sheet of plastic sheet material having a thickness in the range of 0.030

4 to 0.040 inches and a flexural modulus in the range of 75,000 to 200,000 psi;

5 said sheet having a Rockwell hardness in excess of 72;

6 placing said sheet on a flat surface;

7 placing a food article on said sheet;

8 cutting said food article on said sheet using a knife to produce cut pieces;

9 flexing said sheet to define an arcuate trough shape;

10 lifting said sheet in said arcuate trough shape off said flat surface to support said

11 cut pieces; and

12 funneling said cut pieces off said sheet in said arcuate trough shape.

REMARKS

Patent claims 1-9 and added claims 10-15 remain pending. Claims 10, 11, 14 and 15 have been amended in this Response, and new claims 16 and 17 have been added. Patent Owner respectfully requests further examination.

Merged Proceeding

As a preliminary matter, the Examiner states that it should be noted that the Reissue Application has claims 1-15, and the Reexamination Application has claims 1-11. It is Patent Owner's understanding, however, that in accordance with the requirements set forth

in the Decision to Merge Reexamination and Reissue Proceedings mailed April 23, 1998, identical amendments are to be maintained in both the Reissue and the Reexamination. Accordingly, Patent Owner's preliminary amendment filed May 28, 1998 was directed to both the Reissue and Reexamination (merged proceedings) and filed in duplicate for entry into both files, as required. In that preliminary amendment, Patent Owner added claims 12-15, presumably to both the Reissue and the Reexamination. Since both proceedings are conducted under the statutes, rules and case law applicable to reissue practice, claims that meet the requirements for entry into the Reissue application should meet the requirements for entry into the Reexamination. Patent Owner respectfully requests clarification of the reason why the Examiner does not consider claims 1-15 to be pending in both the Reexamination and the Reissue.

Status of Litigation

In accordance with Patent Owner's continuing duty to advise the PTO of the status of the related litigation, Patent Owner hereby advises that the District Court for the Southern District of California has stayed the litigation pending the outcome of these PTO proceedings. A copy of the Order Granting Plaintiff's Motion to Stay the Proceedings is enclosed with this Response.

Support for Amendments

Added claims 10 and 11 were amended to correct a minor informality, as required by the Examiner. The specification was amended as suggested by the Examiner to provide more specific support for the recitation in the claims that the sheet can support a weight of five ounces at a distance of ten inches from the end at which the sheet is held. As discussed below, the Examiner noted that support is provided by claim 1 as part of the original specification.

Added claims 14 and 15 have been split with respect to the thickness ranges they recite, giving rise to newly added claims 16 and 17. Specifically, claims 14 and 15 recited a thickness range of 0.015-0.040 inches. Claim 14 has been amended to recite a

thickness range of 0.015-0.030 inches, and new claim 16 recites a thickness range of 0.030-0.040. Similarly, claim 15 has been amended to recite a thickness range of 0.015-0.030 inches, and new claim 17 recites a thickness range of 0.030-0.040. Support in the specification for this amendment is thus clear.

Claim Rejections - 35 U.S.C. § 251

The Examiner rejects claims 1-15 on the grounds that they allegedly enlarge the scope of the claims and thus constitute a broadening reissue outside the two year statutory period. The Examiner also makes specific reference to alleged enlargement of the scope of claims 10 and 11. Patent Owner respectfully traverses this rejection.

Claims 1-15 incorporate essentially all of the limitations of the claims of the original patent but, by adding certain limitations, recast the original apparatus claims as method-of-use claims. The Examiner appears to contend that a narrowing reissue cannot add a new class of claims, e.g., method-of-use claims, if the claims of the original patent were of a different class, e.g., apparatus claims. The test for whether a reissue is broadening is directed to the individual claims. A claim of a reissue is broadening if it is broader than the original claims in any respect, even though it may be narrower in other respects. See MPEP § 1412.03 (citing In re Ruth, 278 F.2d 729, 126 USPQ 155, 156 (CCPA 1960)). None of the reissue claims directed to the method of using the cutting mat are broader in any respect than the original claims that were directed to the cutting mat (apparatus) itself, because the reissue claims fully set forth and encompass the apparatus as originally claimed. Each claim includes limitations of the same scope as those included in the claims of the original patent, but also includes additional limitations directed to the method of using the cutting mat. It is axiomatic that a claim having the original limitations plus additional limitations cannot be broader than the original claim in any respect. In claim 1, for example, lines 1-12 are, notwithstanding amendments to the numerical parameters, verbatim from the original patent, and recite the structural properties of the cutting mat, but lines 13-19 were added in the reissue application and recite the method of using the mat

for cutting and handling food articles. Claim 1, as amended in the reissue, cannot be broader in scope than claim 1 of the original patent in any respect because the claim includes not only the original structural limitations but also additional method-of-use limitations.

With regard to claims 10 and 11, the Examiner contends that these claims enlarge the scope of patent protection because the means-plus-function language "results in claims wherein the hardness, flexibility and thickness are not properties of the polymer nor sheet formed therefrom, but can result from separate additional components such as a layer of sheet metal or paneling." Applicant respectfully disagrees. The use of the means-plus-function format invokes the limitation of section 112, sixth paragraph that the element shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof. In re Donaldson Co., 16 F.3d 1189, 1190, 29 USPQ 2d 1845, 1849 (Fed. Cir. 1994). Thus, the recitations of "hardness means and thickness means," "flexibility means," and "means for resisting curling" in claims 10 and 11 must be construed to cover those features of the material disclosed in the specification that perform the recited functions, respectively, of "inhibiting perforation by a knife when food articles are cut upon it," "accommodating flexure of said sheet into an arcuate trough shape having sufficient cantilever beam strength" and "resisting curling." The specification identifies certain properties of the sheet, such as its Rockwell hardness, flexural modulus and thickness that perform the recited functions.

In view of the foregoing, Patent Owner respectfully requests reconsideration and withdrawal of this rejection.

Claim Rejections - 35 U.S.C. § 112, ¶ 1

The Examiner rejects claims 14 and 15 on the grounds that they contain subject matter not described in the specification. Specifically, the Examiner contends that the limitation of a thickness between 0.015 inches and 0.040 inches is new matter. The Examiner contends that a narrower claim can be objectionable as based upon new matter,

The same argument applies to claims 1, 10, 11, 12 and 14, regarding which the Examiner contends that the specification does not enable the recitation of the sheet having sufficient cantilever beam strength to support an article weighing at least five ounces spaced at least ten inches from the end of the sheet that is held. The Examiner notes that the specification states that weights in excess of five ounces can be supported at distances as great as 12 to 14 inches from the held end. Patent Owner submits that the specification is enabling for a distance of ten inches because one skilled in the art would know that the weight could be supported equally well at essentially any lesser distance; that person would understand that it is only the maximum distance that is relevant. The phrase "as great as 12 to 14 inches" in the specification clearly points out that this is a maximum. The specification is therefore enabling for any distance less than the approximately 12-14 inch maximum.

The Examiner adds, however, that this specific rejection of claims 1, 10, 11, 12 and 14 could be overcome by amending the specification to disclose the specific capability of the sheet to support an article spaced at ten inches, because a claim filed in the original patent application included this recitation and thus formed part of the original disclosure of the invention. Applicant has therefore amended the specification in this manner. Nevertheless, Patent Owner believes that the alternative of amending the claim is equally available to Patent Owner and therefore Patent Owners submits that these rejections under section 112, first paragraph are improper and respectfully requests reconsideration.

Claim Rejections - 35 U.S.C. § 112, ¶ 2

The Examiner rejects claims 10 and 11 under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner contends that it is not clear how a physical property, e.g., "thickness means," "hardness means," and "flexibility means," constitutes a "means" within the meaning of section 112, sixth paragraph. The Examiner further contends that the flexibility would be an inherent property of a polymeric sheet having the claimed dimensions and hardness. In addition, the Examiner notes an informality in claim 10, line 9.

With regard to whether a physical property can constitute a means within the meaning of section 112, sixth paragraph, Patent Owner is unaware of any case law or other authority to the contrary. The statute provides that the element recited in the claim "shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." Thus, for example, a "thickness means for inhibiting perforation by a knife . . ." should be construed to cover the structure and material and their equivalents, e.g., a plastic sheet having the thickness described in the specification that performs the recited function of inhibiting perforation by a knife. If the Examiner is aware of any case law or other authority prohibiting the use of the means-plus-function format to

describe physical properties, Patent Owner respectfully requests that the Examiner cite such authority.

With regard to the Examiner's assertion that flexibility is an inherent property of a polymeric sheet having the claimed dimensions and hardness, Patent Owner submits that there is no evidence of record in support of this contention. If the Examiner has personal knowledge of such a relationship between flexibility and the dimensions and hardness of polymeric sheets, he is respectfully requested to provide an affidavit attesting to such knowledge. See 37 C.F.R. § 1.104(c)(5)(ii); MPEP § 2144.03. Furthermore, regardless of whether the assertion is true, the law does not require that an inventor limit his claims to any minimal set of elements; additional limitations may be included if it is believed they clarify the invention. Patent Owner believes that the best way to ensure that these claims set forth what is regarded as the invention is to recite limitations relating not only to dimensions and hardness but also flexibility.

With regard to the informality noted in claim 10, line 9 and claim 11, line 12, Patent Owner has amended these claims to insert --sheet-- between "said" and "into".

In view of the foregoing, Patent Owner respectfully requests reconsideration and withdrawal of these rejections under section 112, second paragraph.

Claim Rejections - 35 U.S.C. § 102(a) and (b)

The Examiner rejects claim 10 under 35 U.S.C. § 102(a) as being anticipated by U.K. Patent Publication GB 2248177. Patent Owner respectfully traverses this rejection.

Because the Examiner rejects only claim 10 on these grounds and not other claims, the Examiner's position appears to be that the scope of claim 10 is significantly different from the scope of other claims. This is not so. Claim 10 recites the elements of the invention in means-plus-function format but otherwise closely parallels other claims. As the case law has noted, the means-plus-function language must be interpreted as limiting rather than as expansive. As one CAFC panel stated:

Section 112 thus permits means-plus-function language in a combination claim, but with a "string attached." The "attached string" limits the applicant

to the structure, material, or acts in the specification and their equivalents. Indeed the section operates more like the reverse doctrine of equivalents than the doctrine of equivalents because it restricts the coverage of literal claim language.

Valmont Industries, Inc. v. Reinke Mfg. Co., 25 USPQ2d 1451, 1454 (Fed. Cir. 1993).

A claim element recited in means-plus-function format cannot be broader than those corresponding structures, materials or acts disclosed in the specification plus their equivalents.

Nothing in GB 2248177 discloses or suggests a hardness or flexibility. It discloses only that a flexible cutting mat made of polypropylene (of unspecified type) between 0.8 mm (0.032 inches) and 2.0 mm (0.079 inches) may be used by placing it on a flat surface, cutting food on it using a knife, and then lifting and bending it into a shallow trough shape. There is no evidence that all such mats can, when flexed into this shape, inherently support an article weighing at least five ounces at a distance of at least ten inches from the end at which the mat is held. The Examiner contends that this property is inherent, but Patent Owner submits that it is known that additives can be included in polypropylene that render it more flexible. Thus, based on the description within GB 2248177 itself, it cannot be concluded that this property is inherent. An anticipation rejection cannot properly be based on mere speculation. The limitations must be taught within the reference itself, or clearly inherent. Patent Owner respectfully requests that if the Examiner continues to take the position that this strength and flexibility property is inherent, that the Examiner provide some basis for that conclusion. There is also no evidence that all such mats have no tendency to curl when placed on the flat surface. It is known that mats cut from a roll of plastic sheet material often exhibit a memory property and tend to reassume the curved shape of the roll. "[A]ll limitations in the claims must be found in the reference, since the claims measure the invention." In re Lang, 644 F.2d 856, 862, 209 USPQ 288, 293 (CCPA 1981). It is incumbent on Examiner to identify where in the reference each and every facet of the claimed invention is disclosed. Lindemann Maschinen-fabrik GmbH v. American Hoist and Derrick Co., 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). The Examiner

does not identify where in the reference is disclosed or inherent a flexural modulus, Rockwell hardness, or any other specific facets of the invention applicable to the claims via section 112, sixth paragraph. Patent Owner respectfully requests that if the Examiner continues to take the position that the properties recited in these claims are inherent in this reference, the Examiner provide some basis for his conclusion. If the Examiner has personal knowledge of what one of ordinary skill in the art would know, the Examiner is respectfully requested to provide an affidavit of that personal knowledge. See 37 C.F.R. § 1.104(c)(5)(ii); MPEP § 2144.03. There is no evidence that the mat described in GB 2248177 has physical properties equivalent to the physical properties described in the specification and imported into claim 10 via the application of section 112, sixth paragraph.

As discussed below with regard to the Counter Maid mat, merely because a mat can be used to cut food articles and funnel them into a receptacle does not mean that the mat has equivalent properties to the claimed mat. Rather, seemingly minor differences in physical properties between the claimed invention and prior mats such as the Counter Maid are believed to provide the invention with significantly different and improved performance.

Notwithstanding the foregoing, in the original prosecution, a similar rejection in view of GB 2248177 was overcome by swearing behind the reference. Patent Owner submits that a Rule 131 declaration is of record in the patent file and should be considered by the Examiner. Nevertheless, Patent Owner submits herewith another copy specifically in response to this rejection.

In view of the foregoing, Patent Owner respectfully requests reconsideration and withdrawal of this rejection under section 102(a).

The Examiner also rejects claims 10-11 under 35 U.S.C. § 102(b) as being anticipated by the Rosmat brochure. Patent Owner respectfully traverses this rejection on the same grounds as set forth above with regard to the rejection of claim 10 under 35 U.S.C. § 102(a). Claims 10 and 11 are not broader in scope than other claims merely because they use the means-plus-function format.

Nothing in the Rosmat brochure discloses or suggests a hardness or flexibility range. It discloses only that a flexible plastic cutting mat may be used by placing it on a flat surface, cutting food on it using a knife, and then lifting and bending it into a shallow trough shape. Although the description and illustration show food being handled, there is no evidence that all such mats can, when flexed into this shape, inherently support an article weighing at least five ounces at a distance of at least ten inches from the end at which the mat is held. The Examiner contends that this property is in fact inherent, but as discussed above, Patent Owner submits that it is known that additives can be included in polypropylene that render it more flexible. Thus, based on the description within the Rosmat brochure itself, it cannot be concluded that this property is inherent. An anticipation rejection cannot properly be based on mere speculation. The limitations must be taught within the reference itself, or clearly inherent. There is also no evidence that all such mats have no tendency to curl when placed on the flat surface. As pointed out above, it is incumbent on Examiner to identify where in the reference each and every facet of the claimed invention is disclosed. Lindemann Maschinen-fabrik GmbH v. American Hoist and Derrick Co., 730 F.2d 1452, 221 USPQ 481 (Fed. Cir. 1984). Patent Owner respectfully requests that if the Examiner continues to take the position that the properties recited in these claims are inherent in this reference, the Examiner provide some basis for his conclusion. If the Examiner has personal knowledge of what one of ordinary skill in the art would know, the Examiner is respectfully requested to provide an affidavit of that personal knowledge. See 37 C.F.R. § 1.104(c)(5)(ii); MPEP § 2144.03. There is no evidence that the mat described in the Rosmat brochure has physical properties equivalent to the physical properties described in the specification and imported into claims 10-11 via the application of section 112, sixth paragraph.

In view of the foregoing, Patent Owner respectfully requests reconsideration and withdrawal of this rejection under section 102(b).

The Examiner also rejects claims 10-11 under 35 U.S.C. § 102(b) as being anticipated by the Counter Maid product brochure. Patent Owner respectfully traverses

this rejection on the same grounds as set forth above with regard to the other anticipation rejections of claims 10-11.

Nothing in the Counter Maid brochure discloses or suggests a hardness or flexibility. It discloses only that a flexible plastic cutting mat may be used by placing it on a flat surface, cutting food on it using a knife, and then lifting and bending it into a trough shape to funnel or guide food pieces off the mat. Although the description and illustration show food being handled, there is no evidence that all such mats can, when flexed into this shape, support an article weighing at least five ounces at a distance of at least ten inches from the end at which the mat is held. As discussed above, Patent Owner submits that this property is not inherent in every plastic cutting mat because other factors that are not discussed in the Counter Maid brochure can affect it. There is also no evidence that all such mats have no tendency to curl when placed on the flat surface. Patent Owner respectfully requests that if the Examiner continues to take the position that the properties recited in these claims are inherent, that the Examiner provide some basis for that conclusion. As noted above, it is incumbent on the Examiner to identify where in the reference each and every facet of the claimed invention is taught. Yet the Examiner does not point to any teaching of a flexural modulus, Rockwell hardness, thickness or other property, or provide evidence of knowledge in the art that would compel the conclusion that the properties are inherent. The Examiner contends that because the illustration in the Counter Maid product brochure shows a woman flexing the cutting mat, a person of ordinary skill in the art would know that the mat would have physical properties the same or equivalent to the physical properties described in the specification and imported into claims 10-11 via the application of section 112, sixth paragraph. There is no evidence whatsoever that a person of ordinary skill in the art would have such knowledge. As discussed below, for example, the Patent Owner's Statement submitted in the reexamination proceeding and now of record in the reissue by the merging of these proceedings presented evidence in the form of a declaration attesting to the relatively low level of "ordinary" skill in this art. The Examiner does not comment on this evidence in

making this rejection, but rather only states in a conclusory manner that a person of ordinary skill in the art would "envisage a flexible cutting mat within the claimed range." The Examiner can attempt to rebut this evidence by presenting contrary evidence, but he has not done so.

In view of the foregoing, Patent Owner respectfully requests reconsideration and withdrawal of this rejection under section 102(b).

The Examiner rejects claim 11 under 35 U.S.C. § 102(b) as being anticipated by the Allied Resinous product information. Patent Owner respectfully traverses this rejection on the same grounds as set forth above with regard to the other anticipation rejections of claim 11.

As with the other anticipation rejections of claims 10 and 11, it is unclear to Patent Owner whether the Examiner is properly construing these claims in accordance with section 112, sixth paragraph. The Examiner states that "the product information discloses a flexural modulus and a Rockwell hardness range which inherently would result in a sheet having means for resisting curling when placed on a flat surface, hardness and thickness means for inhibiting perforation by a knife when food articles are cut upon it, and flexibility means for accommodating flexure of said sheet into an arcuate trough shape having sufficient cantilever beam strength when flexed around a longitudinal centerline [and held proximate a first end to support an article spaced at least ten inches from said first end and weighing at least five ounces]." The Examiner's statement suggests he believes that the Allied Resinous sheet would have some means for achieving these functions, but does not explain what those means are. Although the Examiner does note that the Allied Resinous information discloses sheets as thin as 0.020 inches (i.e., a "thickness means"), the Examiner does not similarly explain how the Allied Resinous sheet has the other means disclosed in the specification or their equivalents that apply to the claims via section 112, sixth paragraph. Furthermore, as discussed above, Patent Owner submits that nothing in the Allied Resinous product information inherently discloses that the sheet has the recited cantilever beam strength, i.e., at least five ounces at ten inches. As stated above with

regard to other rejections, if the Examiner continues to take the position that the properties applicable to this claim via section 112, sixth paragraph are inherently disclosed in the Allied Resinous publication, he identify where in the reference each such limitation is taught and provide an affidavit of personal knowledge or other evidence that would compel the inherency conclusion.

In view of the foregoing, Patent Owner respectfully requests reconsideration and withdrawal of this rejection under section 102(b).

The Examiner rejects claims 1-11 and additional reissue claims 12-15 under 35 U.S.C. § 102(b) based upon public use or sale of the invention relating to the Counter Maid mat. Patent Owner respectfully traverses this rejection.

To support a rejection under section 102(b), each and every limitation recited in the claim must be disclosed in the cited prior art reference, exactly. In re Spada, 15 USPQ2d 1655 (Fed. Cir. 1990); Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 771, 218 USPQ 781, 789 (Fed. Cir. 1983). The evidence of record establishes that the Counter Maid mat has a thickness of about 0.0085-0.009 inches. As set forth in the declaration of Marvin Mick, which was submitted with the reissue application, a sample of what he presumed, absent evidence to the contrary, to be the Counter Maid mat was measured with a micrometer and found to be in this range. It is also believed that an actual sample of the Counter Maid mat was submitted by the Reexamination requestor and is of record and available for the Examiner's inspection. None of claims 1-11 and additional reissue claims 12-15 recites a thickness range that encompasses the thickness of the Counter Maid mat.

Independent claim 1, as amended by the Preliminary Amendment filed May 28, 1998, recites that the plastic material has a thickness between 0.010 and 0.030 inches. Independent claim 6, as amended by the Preliminary Amendment filed May 28, 1998, similarly recites that the plastic material has a thickness between 0.010 and 0.030 inches. Independent claims 10 and 11 include similar limitations recited in means-plus-function format. Independent claim 12, as added by the Preliminary Amendment filed May 28, 1998, recites that the plastic material has a thickness between 0.030 and 0.060 inches.

Independent claim 13, as added in the Preliminary Amendment filed May 28, 1998, similarly recites that the plastic material has a thickness between 0.030 and 0.060 inches. Independent claim 14, as added in the Preliminary Amendment filed May 28, 1998, recites that the plastic material has a thickness between 0.015 and 0.040 inches. Independent claim 15, as added in the Preliminary Amendment filed May 28, 1998, similarly recites that the plastic material has a thickness between 0.015 and 0.040 inches. The Counter Maid mat that was sold or offered for sale did not have the thickness recited in any of these claims. Therefore, the claims cannot be anticipated. Furthermore, with regard to claim 6, there is no evidence that the Counter Maid product had a flexural modulus in the range of 75,000-200,000 psi. There is, of course, some evidence of record that the manufacturer of the plastic resin from which the Counter Maid product was presumably made specified that that brand of resin had a flexural modulus of 210,000 psi, and on page 6 of the Office action the Examiner states his position that the flexural modulus was 210,000 psi. Thus, claim 6 cannot be anticipated for this additional reason.

Claims 2-5 depend from claim 1 and are not anticipated for the same reason as claim 1. Furthermore, with regard to claim 3, there is absolutely no evidence that the Counter Maid mat was 0.010 inches in thickness. This claim cannot be anticipated. Claims 7-9 depend from claim 6 and are not anticipated for the same reason as claim 6.

In view of the foregoing, Patent Owner respectfully requests reconsideration and withdrawal of this rejection of claims 1-11 and added claims 12-15 under section 102(b).

The Examiner rejects claims 1-11 and added claims 14 and 15 under 335 U.S.C. § 102(b) based upon a public use or sale of the invention allegedly admitted by the inventor in his Supplemental Reissue Declaration. Patent Owner respectfully traverses this rejection.

As set forth in the Supplemental Reissue Declaration, more than one year before the CIP application was filed on June 13, 1994, Patent Owner and/or its licensee sold cutting mats of the type disclosed in the patent and having a thickness in the range of 0.0080-.030 inches. Nevertheless, claim 1, which recites a thickness range of 0.010-0.030

inches, is entitled to the benefit of the filing date of the parent application because all limitations recited in that claim were originally disclosed in the parent application that was filed December 22, 1992. The sales to which the Supplemental Reissue Declaration refers did not occur more than one year prior to December 22, 1992. Therefore, those sales are not prior art under section 102(b) with respect to claim 1 and claims 2-5, which depend from claim 1. Similarly, claim 6, which recites a thickness range of 0.010-0.030 inches, is entitled to the benefit of the filing date of the parent application because all limitations recited in that claim were originally disclosed in the parent application that was filed December 22, 1992. The sales to which the Supplemental Reissue Declaration refers did not occur more than one year prior to December 22, 1992. Therefore, those sales are not prior art under section 102(b) with respect to claim 6 and claims 7-9, which depend from claim 6. Claims 10 and 11 recite similar limitations in means-plus-function format and are similarly entitled to the benefit of the filing date of the parent application.

With regard to claims 14 and 15, Patent Owner has amended these claims. The intervening sales were limited to sheets less than 0.030 inches in thickness. As noted above, claims 14 and 15 have been split with respect to the thickness ranges they recite, giving rise to newly added claims 16 and 17. Claims 14 and 15 have been amended to recite a thickness range of 0.015-0.030 inches. These claims are not anticipated by the referenced sales because the claims are entitled to the benefit of the filing date of the parent application. New claims 16 and 17, which recite a thickness range of 0.030-0.040 inches, are not anticipated because the product that was sold did not have a thickness within that range.

Claim Rejection - 35 U.S.C. § 102(f)

The Examiner rejects claims 1-11 under 35 U.S.C. § 102(f) on the basis that the named inventor did not himself invent the claimed subject matter. Patent Owner respectfully traverses this rejection.

Although the named inventor, Roderick Thompson, in the Supplemental Reissue Declaration, admitted that the deficiencies he perceived in the Counter Maid product spurred him to make the improved cutting mat that is the subject of these claims, this does not amount to "derivation" under section 102(f). Indeed, the Counter Maid was made of record in the original patent application. To support unpatentability on the basis of derivation, it must be shown that another person had previously made the same invention and communicated it to the named inventor. The inquiry under section 102(f) is one of anticipation and not of obviousness. See Gambro Lundia AB v. Baxter Healthcare Corp., 42 USPQ2d 1378, 1382-1383 (Fed. Cir. 1997). Anticipation requires the prior disclosure of each and every facet recited in the claim at issue. In re Spada, 15 USPQ2d 1655 (Fed. Cir. 1990); Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 771, 218 USPQ 781, 789 (Fed. Cir. 1983). In other words, the claimed invention must be the same invention as disclosed to the named inventor by another. See also Benchcraft Inc. v. Broyhill Furniture Indus. Inc., 7 USPQ 1257, 1278 (N.D. Miss. 1988) (holding that even though named inventor admitted that prior photographs were "inspiration" for his design, patent not invalid on derivation grounds because prior photographs did not disclose each and every element of claimed design).

The claimed cutting mat is not the same invention as the Counter Maid mat. As Mr. Thompson explained in the Supplemental Reissue Declaration, he was unable to determine the type of plastic material from which the Counter Maid mat was made, but he perceived certain problems in the sample mat he obtained, including its susceptibility to perforation, its flimsiness, and an inability to remain flat on a table. Mr. Thompson explained that he believed the flimsiness and susceptibility to perforation were caused by several factors, including a plastic material that was too soft and/or too thin, and that the tendency to curl that he perceived was caused by it having been manufactured from roll-stock. As a result of his investigations, he developed an improved cutting mat, which was ultimately defined in the patent by a combination of parameter ranges relating to thickness, flexural modulus, Rockwell hardness, cantilever beam strength, and a "lay flat" property.

Although the evidence is not conclusive, information has come to light in the litigation and these proceedings that suggests Mr. Thompson's emphasis on some of these properties may have been misplaced, and that at least some of the performance differences he obtained in his improved cutting mat may have been due in large part to its increased thickness. Mr. Thompson originally believed a thickness in the range of 0.008-0.030 inches contributed to the desired qualities, as reflected in the parent patent application, but later discovered that even thicker sheets had suitable qualities and filed a CIP application disclosing a broader range.

The claims that recite a lower bound for the thickness range of 0.010 describe an invention that is not the same as the Counter Maid cutting mat that Mr. Thompson had in his possession. Although other differences may exist, the evidence is clear that the mat of the claimed invention is thicker by 1-2 mils. This increase in thickness is more significant than one might expect. Scientists and plastics engineers have long known that the perceived stiffness of a plastic sheet varies with approximately the cube of its thickness. (Patent Owner can readily provide a Rule 132 declaration or other evidence to this effect if the Examiner requires it.) In other words, most people who are not plastics engineers and scientists are surprised to learn, for example, that an increase of two mils in the thickness of a sheet eight mils in thickness is an increase of only 25 percent, yet it nearly doubles the perceived stiffness ($10^3 / 8^3 = 1.95$).¹ In accordance with this principle, the difference of about 1-2 mils between the prior 8-9 mil Counter Maid cutting sheet and the 10 mil lower bound recited in certain claims is more significant than one might expect. Indeed, one may infer from the disclosure of the Thompson patent that the inventor himself did not recognize the significance of this thickness difference, and attributed the performance differences primarily to having selected a different plastic sheet material.

The claimed cutting mat, even in embodiments at the lower end of the recited thickness ranges, is considerably stiffer than the Counter Maid mat and thus capable of

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This clarifies a statement made in the Preliminary Amendment that included a technical error, for which Patent Owner apologizes.

supporting a surprisingly heavier load. Therefore, it is not the same invention as the Counter Maid mat. In view of the foregoing, Patent Owner respectfully requests reconsideration and withdrawal of this rejection under 35 U.S.C. § 102(f).

Claim Rejections - 35 U.S.C. § 103

The Examiner rejects claims 1-9, 11 and reissue claims 12-15 under 35 U.S.C. § 103(a) as being unpatentable over GB 2248177 as applied above to claim 10 in view of Modern Plastics Encyclopedia (October 1991). Patent Owner respectfully traverses this rejection.

With regard to claims 1-11, as discussed above with regard to a different rejection based on GB 2248177, Patent Owner submits that this reference is not prior art because the named inventor made the invention before the effective date of this reference. As noted above, a Rule 131 declaration to this effect is believed to be of record in this case, but a copy is nonetheless submitted herewith. It is believed that it is therefore improper to apply GB 2248177 as a reference, and Patent Owner respectfully requests reconsideration and withdrawal of this rejection.

Notwithstanding the foregoing, Patent Owner submits that the claimed invention would not have been obvious to a person of ordinary skill in the art. Although Modern Plastics teaches the existence of plastic materials (polypropylene) that have Rockwell hardnesses in the range of 80-102 and 65-96 and flexural moduli in the range of 130,000-200,000 psi, Modern Plastics does not teach or suggest forming such plastic material into a sheet that is 0.010-0.030 inches in thickness and using the sheet as a flexible cutting mat in the manner recited in the claims. As the Examiner notes, GB 2248177 teaches the method of using a flexible cutting mat made of a sheet of an unspecified type of polypropylene that is 0.032-0.079 inches in thickness. Such a cutting mat is thicker than that recited in claims 1-11. As discussed above, seemingly minor differences in thickness have a surprising effect on the perceived stiffness. Even the inventor named in GB 2248177, John Cox, acknowledges that the mat described in his patent is too thick to be readily flexed. (See Declaration of John Cox, attached to this Response.)

Furthermore, claim 1 recites a hardness range of 72-90. Although this range overlaps hardness ranges of known polypropylene, it is important to note that it does not encompass all polypropylene. Claim 5 further limits the invention recited in claim 1 to the even narrower range of 75-90, and thus limits the plastic material to an even smaller range of known materials. Similarly, claim 6 recites a hardness range in excess of 72 and a flexural modulus range of 75,000-200,000 psi, and claim 8 further limits the invention of claim 6 to the range of 75-90. Thus, it is far from clear that a person of ordinary skill in the art would be motivated to select a plastic having the properties within the recited ranges and form it into a sheet that is within the recited thickness range of 0.010-0.030 inches, when GB 2248177 teaches a thicker mat, and only the extreme upper end of the recited thickness range is close to the extreme lower end of the prior mat. Rather, substantial experimentation would be necessary to achieve the significant performance difference achieved by the present invention.

It has been held that "obvious to try" is not the standard under section 103(a). In some cases, what would have been "obvious to try" would have been to vary all parameters or try each of numerous possible choices until one possibly arrived at a successful result, where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful. In re Farrell, 7 USPQ2d 1673 at 1681 (Fed. Cir. 1988). The Examiner contends that there would have been a "reasonable expectation of success of producing a flexible cutting mat having lay-flat characteristics and sufficient cantilever beam strength such that it can be used for cutting and handling food articles," but the invention goes beyond the mere concept of a flexible cutting mat having some amount of cantilever beam strength "sufficient" to cut and handle some amount of food articles. Rather, the invention provides a carefully determined balance between stiffness, flexibility and hardness such that a significant amount of food articles can be cut upon it without perforating, it can be flexed easily into the trough shape, and still has sufficient stiffness to allow the food to be carried upon it in the trough shape without collapsing. These properties are achieved by a mat

made of a type of plastic material within the specific claimed range (characterizable by certain ranges of hardness and flexural moduli) having a thickness within the specific range recited in the claims. Nothing in the prior art of record suggests that such parameters are critical or in what combinations they would result in a mat having the desired properties.

Along the same lines, in connection with a different rejection under section 103(a) that is set forth below, the Examiner contends that the type of plastic would have been obvious to choose through "routine experimentation commensurate with the desired properties of the end product." Nevertheless, neither the "desired properties" nor the criticality of the parameters of the plastic sheet that, in certain combinations, give rise to such properties are taught in any prior art reference of record. The named inventor appears to have been the first to recognize that prior mats suffered from certain problems, and that the properties that would be desirable are a balance of high strength, resistance to perforation and flexibility. These are seemingly incompatible properties, since increasing thickness and/or hardness generally decreases flexibility. These desired properties may seem obvious to the Examiner in hindsight, but there is no evidence that they were known or suggested in the art prior to the invention.

As the Examiner concedes, GB 2248177 discloses nothing about the type of polypropylene. In the present case, a person attempting to make a flexible cutting mat having the relatively great thickness described in GB 2248177 might believe it necessary to use a more flexible plastic. If it is the Examiner's position that all polypropylenes indicated by the Modern Plastics table, i.e., polypropylenes having all possible combinations of flexural modulus and Rockwell hardness, would have equivalent properties of strength, resistance to perforation, and flexibility when formed into a sheet of any thickness within the ranges at issue, then Patent Owner respectfully requests the Examiner cite a reference or provide an affidavit of personal knowledge in accordance with MPEP § 2144.03 in support of that contention. Patent Owner is aware of no evidence of record supporting such broad equivalency. Indeed, it seems a reasonable inference that such a broad range of polypropylenes would not be commercially available if they all had

equivalent properties of strength, resistance to perforation, and flexibility, because there would be no need for differentiation.

Stated another way, it is well-established that for the teachings of references to be combined in support of a rejection under section 103(a), there must be some teaching or suggestion in the prior art that would have motivated the person of ordinary skill to have made the invention as claimed. See, e.g., ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). Absent such a teaching or suggestion in the prior art, a claimed invention can only be arrived at by impermissibly employing hindsight reasoning. "To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome, wherein that which only the inventor has taught is used against its teacher." W.L. Gore & Assoc., Inc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 311 (Fed. Cir. 1983). Notwithstanding the difference in thickness between the range taught in GB 2248177 and the ranges recited in claims 1-11, if there were a motivation in the prior art to have used one type of polypropylene, and it could somehow be established that all polypropylenes were known in the prior art to have equivalent properties of strength, resistance to perforation, and flexibility, then it is arguably true that there would have been a motivation in the art to used all such other polypropylenes. Nevertheless, there is no evidence of record establishing such equivalency. The Examiner's speculation is not evidence of knowledge in the prior art.

The Examiner did not comment on the evidence of commercial success of the claimed invention and the evidence that others had tried and failed to produce a similar invention that Patent Owner presented at the time of filing the reissue application and in the Patent Owner's Statement filed in the Reexamination. Because the Examiner may not have considered these arguments after the Reexamination was merged with the Reissue, Patent Owner hereby incorporates by reference the arguments and evidence set forth in the Patent Owner's Statement into this Response in the merged proceeding.

Commercial success of an invention and the failure of others are so-called secondary considerations or objective evidence of non-obviousness, and it is improper for the trier of obviousness to ignore such evidence when it is presented. Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1539, 218 USPQ 871, 879 (Fed. Cir. 1983). "Indeed, evidence of secondary considerations may often be the most probative and cogent evidence in the record." Id. Evidence has been presented that shows the Counter Maid mat was a failure, whereas the present invention was a success, and the success was attributable to the differences between the Counter Maid mat and the present invention rather than other factors. If the Examiner has in fact reviewed and considered the evidence of commercial success and failure of others that Patent Owner submitted, Patent Owner respectfully requests the Examiner state such, so as to present a clear record for any appeal.

The Patent Owner's Statement also presented evidence in support of non-obviousness based on the relatively low level of ordinary skill in the art. As discussed more fully therein, ordinary designers of cutting boards, which are conventionally little more than relatively thick slabs of wood, plastic or hard rubber, would not have the extensive knowledge of plastics that the Examiner appears to attribute to the person of ordinary skill in the art. The Examiner did not indicate in the Office action that he considered this evidence and Patent Owner's arguments in connection with it, and Patent Owner respectfully requests confirmation that these arguments were considered.

In addition, it was argued in the Patent Owner's Statement that discerning the differences between the claimed invention and the prior art must not be confused with the requirement that it is the non-obviousness of the invention as a whole that must be considered, including the problem and its solution. As noted therein, it is error to focus "solely on the product created, rather than on the obviousness or non-obviousness of its creation. Lindemann Maschinen-fabrik GmbH v. American Hoist and Derrick Co., 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984).

In view of the foregoing, including the arguments and evidence set forth in the Patent Owner's Statement, Patent Owner respectfully requests reconsideration and withdrawal of this rejection of claims 1-9, 11 and added claims 12-15 under section 103(a).

The Examiner also rejects claims 1-8 and added claims 12-15 under 35 U.S.C. § 103(a) as being unpatentable over the Rosmat brochures, as applied above to claims 10-11, in view of Modern Plastics Encyclopedia (October 1991, pp. 414-417) as applied above to claims 1-9 and 11-15, and further in view of the VITRAPAD product information sheets (Stanley Smith & Co. Plastics Ltd.) and the Amari product information brochure. Patent Owner respectfully traverses this rejection.

Patent Owner hereby incorporates the arguments set forth above with regard to the other rejection of claims 1-9 and 11-15 under section 103(a), including the arguments and evidence relating to the objective indicia of non-obviousness.

Further to the Examiner's arguments addressed above as applied to claims 1-9 and 11-15, the Examiner contends that claims 1-8 and 12-15 would have been obvious to a person of ordinary skill in the art because the VITRAPAD product information and Amari product information establish that plastic sheets having thicknesses within the claimed ranges were known in the art at the time the invention was made. Patent Owner points out that the VITRAPAD product information only establishes that polypropylene sheets as thin as 1.5 mm (0.059 inches) were usable as cutting boards. Moreover, there is no suggestion in the VITRAPAD product information that such cutting boards can be flexed and used to transport food articles as set forth in the claims. Patent Owner also points out that the Amari product information does not even suggest a cutting board use; rather, it only establishes that polypropylene sheets as thin as 1.0 mm (0.040 inches) and polyethylene sheets as thin as 0.5 mm (0.197 inches) were known. The thinnest sheets suggested by these references are considerably thicker than the sheet recited in claims 1-8, and at the extreme upper bounds of the thickness ranges recited in claims 12-15. The sheets suggested by the VITRAPAD and Amari product information are clearly not intended to be flexed and would be difficult to flex due to their thickness. There is absolutely no teaching

or suggestion in these references that would motivate a person of ordinary skill in the art to use such sheets in the manner recited in the claims.

The Examiner states that it is his alternative position that the Rosmat is essentially the same cutting mat disclosed in GB 2248177 and that, accordingly, the thickness of the Rosmat is embraced by the ranges of the flexible sheet set forth in the claims. Patent Owner respectfully submits that the Rosmat brochure must stand on its own as a prior art printed publication, and that the properties of any actual cutting mat product sold under the Rosmat name cannot be incorporated by inference. As the Examiner recognizes, the evidence of record indicates that the English manufacturers of the Rosmat are the applicants in GB 2248177. Nevertheless, there is no evidence of record that the Rosmat product was ever on sale or in public use in the United States; therefore, the Rosmat product itself is not prior art upon which the Examiner can presently rely under section 102(b). The two published references—the Rosmat printed brochure and GB 2248177—must be considered independently of one another and can only be relevant to the patentability of the present invention insofar as what each reference teaches within its four corners. And, as discussed above, GB 2248177 is not prior art with respect to at least claims 1-8 because the invention was made before its effective date. The invention as set forth in claims 1-8 and 12-15 would not have been obvious for these additional reasons.

In view of the foregoing, Patent Owner respectfully requests reconsideration and withdrawal of this rejection of claims 1-8 and 12-15 under section 103(a).

Conclusion

Patent Owner believes that all rejections have been traversed and that all claims are allowable over the prior art. Patent Owner respectfully solicits further examination and allowance of the Reissue application and Reexamination claims.

Also, it is respectfully pointed out that a first copy of the Office action was apparently erroneously received from the PTO by Patent Owner itself, New Age Products of Oceanside, California, and another copy received by Patent Owner's undersigned

attorneys of record some days later. Since the period for response is extremely shortened in this Reissue and Reexamination proceeding, it is respectfully requested that all further communications from the PTO be properly addressed to the attorneys of record.

This amendment is filed in duplicate for entry in both the Reissue and Reexamination files.

Respectfully submitted,

Dated: September 17, 1998

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